

In the Claims

Please amend the claims as follows. Applicants present a full set of claims showing markups of the claims with insertions and deletions indicated by underlining and strikethrough text, respectively.

1. (Currently amended) A synthetic or isolated ~~An~~ oligonucleotide molecule for use in the detection of mRNA transcribed from the E6 gene of a human papillomavirus, the oligonucleotide comprising any one of sequence numbers 1-133, wherein the oligonucleotide comprises

a NASBA P1 primer,

a NASBA P2 primer or,

when the oligonucleotide comprises SEQ ID NO:18, a molecular beacon probe, and

when the oligonucleotide comprises SEQ ID NO:16, then the oligonucleotide further comprises GATGCAAGGTCGCATATGAG (SEQ ID NO:387).

2. (Currently amended) A synthetic or isolated ~~An~~ oligonucleotide molecule according to claim 1 which is an oligonucleotide primer selected from:

(i) a NASBA P1 primer comprising one of sequence numbers 2, 4, 8, 11, 14, 17, 20, 22, 25, 28, 31, 34, 37, 39, 42, 45, 48, 50, 52, 57, 60, 63, 65, 69, 71, 75, 78, 81, 84, 87, 90, 92, 96, 98, 100, 105, 107, 111, 113, 115, 121, 126, 127, 128 or 129; and

(ii) a NASBA P2 primer comprising one of sequence numbers 1, 3, 7, 10, 13, 16, 19, 21, 24, 27, 30, 33, 36, 38, 41, 44, 47, 49, 51, 56, 62, 64, 68, 70, 74, 77, 80, 83, 86, 89, 91, 95, 97, 99, 104, 106, 110, 112, 114, 120, 103, 131, 132 or 133; ~~and~~

~~(iii) a PCR primer comprising one of sequence numbers 1, 3, 7, 10, 13, 16, 19, 21, 24, 27, 30, 33, 36, 38, 41, 44, 47, 49, 51, 56, 59, 62, 64, 68, 70, 74, 77, 80, 83, 86, 89, 91, 95, 97, 99, 104, 106, 110, 112, 114, 120, 2, 4, 8, 11, 14, 17, 20, 22, 25, 28, 31, 34, 37, 39, 42, 45, 48, 50, 52, 57, 60, 63, 65, 69, 71, 75, 78, 81, 84, 87, 90, 92, 96, 98, 100, 105, 107, 111, 113, 115, 121, 126, 127, 128, 129, 130, 131, 132 or 133.~~

3. (Currently amended) A synthetic or isolated ~~An~~ oligonucleotide primer according to claim 2 which is a NASBA P1 primer having the sequence ATTCTAATACGACTCACTATAGGGAGAAGG-SEQ, wherein SEQ represents any one of sequence numbers 2, 4, 8, 11, 14, 17, 20, 22, 25, 28, 31, 34, 37, 39, 42, 45, 48, 50, 52, 57, 60, 63, 65, 69, 71, 75, 78, 81, 84, 87, 90, 92, 96, 98, 100, 105, 107, 111, 113, 115, 121, 126, 127, 128 or 129, and wherein AATTCTAATACGACTCACTATAGGGAGAAGG is SEQ ID NO:385.
4. (Currently amended) A synthetic or isolated ~~An~~ oligonucleotide primer according to claim 2 which is a NASBA P2 primer having the sequence GATGCAAGGTCGCATATGAG-SEQ wherein SEQ represents any one of sequence numbers 1, 3, 7, 10, 13, 16, 19, 21, 24, 27, 30, 33, 36, 38, 41, 44, 47, 49, 51, 56, 59, 62, 64, 68, 70, 74, 77, 80, 83, 86, 89, 91, 95, 97, 99, 104, 106, 110, 112, 114, 120, 130, 131, 132 or 133, and wherein GATGCAAGGTCGCATATGAG is SEQ ID NO:387.
5. (Currently amended) A synthetic or isolated ~~An~~ oligonucleotide molecule according to claim 1 which is a probe for use in the detection of mRNA transcribed from the E6 gene of a human papillomavirus comprising one of sequence numbers: 5, 6, 9, 12, 15, 18, 23, 26, 29, 32, 35, 40, 43, 46, 53, 54, 55, 58, 61, 66, 67, 72, 73, 76, 82, 85, 88, 93, 94, 101, 102, 103, 108, 109, 116, 117, 118, 119, 122, 130, 131, 132 or 133.
- 6.-7. (Canceled)
8. (Withdrawn and currently amended) A synthetic or isolated ~~An~~ oligonucleotide primer-pair for use in the detection of mRNA transcripts from the E6 gene of HPV 31, comprising a NASBA P2 primer comprising sequence number 30 and a NASBA P1 primer comprising sequence number 31.
9. (Withdrawn and currently amended) A synthetic or isolated ~~An~~ oligonucleotide primer-pair for use in the detection of mRNA transcripts from the E6 gene of HPV 33, comprising: a

NASBA P2 primer comprising sequence number 38 and a NASBA P1 primer comprising sequence number 39.

10-15. (Canceled)

16. (Withdrawn and currently amended) A synthetic or isolated ~~An~~ oligonucleotide primer-pair for use in the detection of mRNA transcripts from the E6 gene of HPV 45, comprising: a NASBA P2 primer comprising sequence number 89 and a NASBA P1 primer comprising sequence number 90.

17-20. (Canceled)

21. (Withdrawn and currently amended) A primer/probe set comprising a synthetic or isolated oligonucleotide primer-pair according to any one of claims 8, 9 or 16 and at least one synthetic or isolated oligonucleotide probe specific for amplification products generated using the primer-pair.

22. (Withdrawn and currently amended) A method of detecting HPV mRNA in a test sample suspected of containing HPV which comprises performing a nucleic acid sequence based amplification (NASBA) reaction on a preparation of nucleic acid isolated from the test sample to amplify a portion of the mRNA transcribed from the E6 gene of HPV, wherein the amplification reaction is performed using a synthetic or isolated oligonucleotide primer-pair according to any one of claims 8, 9 or 16.

23-24. (Canceled)

25. (Withdrawn and currently amended) A method according to claim 22 which comprises:
(a) assembling a reaction mixture comprising said synthetic or isolated oligonucleotide primer-pair, an RNA directed DNA polymerase, a ribonuclease that hydrolyses the RNA strand of an RNA-DNA hybrid without hydrolysing single or double stranded RNA or

DNA, an RNA polymerase that recognises said promoter, and ribonucleoside and deoxyribonucleoside triphosphates;

(b) incubating said reaction mixture with a preparation of nucleic acid isolated from a test sample suspected of containing HPV under reaction conditions which permit a NASBA amplification reaction; and

(c) detecting and/or quantitatively measuring any HPV-specific product of the NASBA amplification reaction.

26. (Withdrawn) A method according to claim 25 wherein step (c) comprises real-time detection of an HPV-specific product of the NASBA amplification reaction.

27. (Withdrawn) A method according to claim 25 wherein the reaction mixture further comprises a molecular beacons probe oligonucleotide and the formation of any HPV-specific NASBA product in the NASBA reaction is monitored by detecting fluorescence from the fluorescent moiety included in the molecular beacons probe.

28. (Canceled)

29. (Withdrawn and currently amended) A reagent kit for use in the detection of HPV by NASBA, the kit comprising ~~an~~ a synthetic or isolated oligonucleotide primer-pair as defined in any one of claims 8, 9 or 16 and optionally an enzyme mixture comprising an RNA directed DNA polymerase, a ribonuclease that hydrolyses the RNA strand of an RNA-DNA hybrid without hydrolysing single or double stranded RNA or DNA, and an RNA polymerase that recognises the promoter sequence present in at least one NASBA P1 primer oligonucleotide included in the reagent kit.

30. (Currently amended) A synthetic or isolated ~~An~~ oligonucleotide molecule according to claim 5 which is a molecular beacon probe.

31. (Withdrawn) A method according to claim 26 wherein the reaction mixture further comprises a molecular beacons probe oligonucleotide and the formation of any HPV-specific

NASBA product in the NASBA reaction is monitored by detecting fluorescence from the fluorescent moiety included in the molecular beacons probe.